

CLAIMS

1) Method for evaluating and/or controlling the quality of service of a telecommunication link via a network, in particular a VoIP link between two terminals, wherein it consists in performing the following operations:

- determination of the edge equipment,
- determination of the impairments introduced by the various pieces of equipment or hardware involved in the concerned telecommunication link,
- real time measurement of delay and packet loss in relation with said telecommunication link,
- real time measurement of noise in relation with said telecommunication link,

and then computing the values of the foregoing determined or measured parameters and factors to provide an indicator, preferably a numerical indicator, representative of the quality of service perceived by the user(s) of said telecommunication link.

2) Method according to claim 1, wherein the measurement of delay and packet loss is provided by edge equipment and in that the impairments induced by the involved pieces of equipment or hardware is retrieved from a library or a similar storage means containing information about the possibly involved pieces of equipment.

3) Method according to anyone of claims 1 and 2, wherein the noise measurement is performed by means of a probe, preferably near one of the ends of the concerned telecommunication link.

4) Method according to anyone of claims 1 to 3, wherein, when the quality of service indicator falls below or reaches a preset acceptable minimum value, an event is automatically generated, such as an alarm or an action on the traffic load of the network or at least of a part of said network.

5) Method according to anyone of claim 1 to 4, wherein one or several computed quality of service indicator value(s) is (are) recorded in connection with the considered telecommunication link, and analysed after said link has vanished.

6) Method according to anyone of claims 1 to 5, wherein it is performed automatically for each call.

7) Method according to anyone of claims 1 to 5, wherein it is performed for a specific communication route, automatically or on demand, once, several times or in a repetitive manner.

8) Method according to anyone of claims 1 to 5, wherein it is performed on-demand to realise a diagnostic of part of the network, such as for example a port or a mode.

9) Measurement and evaluation tool for evaluating and/or controlling the quality of service of a communication link via network, an particular a VoIP between two terminals, wherein it comprises means able to perform the following operations:

- determination of the edge equipment,
- determination of the impairment introduced by the various pieces of equipment or hardware involved in the concerned telecommunication link,
- real time measurement of delay and packet loss in relation with said telecommunication link,

and also computing means which are able to provide a numerical indicator based on the foregoing determined or measured parameters and factors and representative of the quality of service in relation with said telecommunication link.

10) Measurement and evaluation tool according to claim 9, wherein it comprises a noise measurement probe and also means to establish a communication with a library or a similar storage means containing information about the pieces of equipment or hardware possibly involved in the construction of the telecommunication link and also means able to establish a communication with at least one of the two terminals of said telecommunication link.